

Water-Data Report 2008

01408009 MINGAMAHONE BROOK NEAR EARLE, NJ

MANASQUAN RIVER BASIN

LOCATION.--Lat 40°12′45″, long 74°10′06″ referenced to North American Datum of 1983, Howell Township, Monmouth County, NJ, Hydrologic Unit 02040301, at bridge on Cranberry Bog Road, 0.6 mi upstream from East Branch Mingamahone Brook, and 1.7 mi west of Earle.

DRAINAGE AREA.--3.32 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1998 to current year.

GAGE .-- Staff gage.

DISCHARGE MEASUREMENTS WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Discharge, in ft³/s
Nov 8, 2007	3.21
Mar 5, 2008	7.88
May 12, 2008	9.47
Aug 20, 2008	1.42

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WATER-QUALITY RECORDS

PERIOD OF RECORD .-- Water years 1971-74, 1998 to current year.

REMARKS.--Cooperative Network Site Descriptor: Undeveloped Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 12.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Sample medium and type	Instan- taneous dis- charge, ft3/s (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)
Nov									
08	1010	Surface water, regular	3.2	11	.365	.318	765	11.7	95
Mar									
05	1030	Surface water, replicate	7.8	20	.048	.037	751	9.2	81
<i>05</i>	1030	QC - Surface water, split replicate							
<i>05</i>	1031	QC - Surface water, concurrent replicate							
May									
12	1130	Surface water, regular	9.5	45	.212	.172	747	8.7	78
Aug									
20	1120	Surface water, regular	1.4	45	.213	.186	765	8.0	81

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WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)
Nov													
08	6.9	140	4.5	6.7	37	12.0	1.69	1.67	6.67	19	13.9	E.07	15.8
Mar													
05	6.1	112	14.0	9.8	25	7.30	1.59	1.83	7.50	E5	14.1	E.07	12.8
<i>05</i>					24	7.20	1.50	1.70	7.20	3	15.0	.08	
<i>05</i>					24	7.20	1.50	1.60	7.20	3	15.0	.08	
May													
12	6.1	114	8.0	10.6	24	7.02	1.47	1.89	7.99	7	14.8	<.12	12.3
Aug													
20	6.7	155	22.0	15.8	53	18.8	1.55	2.08	5.02	34	11.9	E.08	20.4

WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

		Residue	Residue		Ammonia	Ammonia	3	Nitrate	Partic-			Ortho-	
Date	Sulfate water, fltrd, mg/L (00945)	water, fltrd, sum of consti- tuents mg/L (70301)	on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	+ org-N, water, fltrd, mg/L as N (00623)	+ org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	+ nitrite water fltrd, mg/L as N (00631)	ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)
Nov													
08	18.6	E82	106	28	.22		.018	<.04	.05			E.007	.010
Mar													
05	21.2	E70	79	20	E.11		.016	.08	.14	E.19	E.33	<.010	<.008
<i>05</i>	22.0	57	91	E20	<.10	E.21	<.050	.066			E.28	<.050	<.050
<i>05</i>	22.0	56	81	E19	<.10	E.24	<.050	.065			E.30	<.050	<.050
May													
12	18.1	E68	82	82	.16		.028	.04	.43	.20	.63	E.006	<.008
Aug													
20	19.6	E100	113	20	E.12		.064	E.02	.09	E.15	E.24	E.004	<.008

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WATER-QUALITY DATA WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Phos- phorus, water, unfltrd mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Boron, water, fltrd, µg/L (01020)
Nov	(00665)	(00694)	(00688)	(00689)	(00681)	(01020)
08	.046	1.2	M	1.2	2.7	19
Mar						
05	.046	3.0	<.04	3.0	1.7	18
<i>05</i>	.051				1.6	13
<i>05</i>	.057				2.6	13
May						
12	.113	8.1	E.1	8.0	3.4	18
Aug						
20	.062	1.3	<.04	1.3	2.2	20